## **ABSTRACT**

The present invention is a checkpoint processor configured for coupling to individual Web services through a Web services engine. The checkpoint processor can include checkpoint logic programmed to store checkpoint data for the individual Web service instance invocations. The checkpoint processor further can include restart logic programmed to restore the stored checkpoint data to a replacement for failed ones of the individual Web service instance invocations. Finally, the checkpoint processor can include cleanup logic programmed to removed the stored checkpoint data for concluded, non-failed ones of the individual Web service instance invocations.

Notably, in a preferred aspect of the invention, logic can be included for identifying an asynchronous correlator for each one of the individual Web service instance invocations and for storing the asynchronous correlator in association with corresponding ones of the stored checkpoint data.